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Vol. 7. Part 5. Pp. 97-120. 14th May, 1938.

THE PROCEEDINGS

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LONDON:

PUBLISHED BY THE SOCIETY AND

SOLD AT ITS ROOMS, 41, QUEEN'S GATE, S.W.7

Price 3s. 0d.

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ORTHOPTERA COLLECTED IN THE ATLAS MOUNTAINS, MOROCCO, 1934–1936. PART 2.

By K. H. Chapman, B.A., F.R.E.S.

Tetrigidae.

33. *Paratettix meridionalis* (Ramb.). Taroudant, vi.1936, 1 ♂.

Acrididae.

34. *Acrida turrita uvarovi* I. Bol. Taroudant, vi.1936, 3 ♂♂, 1 ♀. Uvarov (1927) pointed out that Moroccan specimens of this species differed from European ones in their large size, and slender habitus; many parts of the body, such as the head, antennae, wings, pronotum, etc., being longer than in the typical form. He suggested that this Moroccan form might be a new subspecies, and I. Bolivar (1935, *Eos*, **2** : 408) described this subspecies from Ifni. With his description these specimens from south-west Morocco agree.

35. *Acridella nasuta* (L.). Ijoukak, vi.1936, 7 ♂♂, 3 ♀♀. Mouldirt, vi.1936, 1 ♀. Azrou, vi.1936, 1 ♂. This species was very common in the small native maize fields which are found terracing some parts of the western Great Atlas.

36. *Calephorus compressicornis* (Latr.). Timhadit, ix.1935, 2 ♂♂, 5 ♀♀.

37. *Omocestus lucasi* (Bris.). Sidi Ali, ix.1935, 1 ♂, 1 ♀. Timhadit, ix.1935, 3 ♂♂, 1 ♀.

38. *Omocestus raymondi* (Yers.). Tizi N'Test, vi.1936, 3 ♂♂, 4 ♀♀. Azrou, vi.1936, 2 ♂♂. Sidi Ali, vi.1936, 1 ♀. Marrakesh, vi.1936, 1 ♂.

39. *Omocestus alluaudi* Uv. Ari Ayachi, viii.1934, 1 ♀. This is the only specimen known besides the type male described by Uvarov (1927, *Bull. Soc. Sci. nat. Maroc*, **7** : 202) and is the only female specimen known. The type is from Tachdirt, and the species is thus now shown to occur in both the eastern and western Great Atlas. The following description of the female is by Dr. B. P. Uvarov :

> ♀. Considerably larger than the male. Frontal ridges flattened but not sulcate below the ocellus. Fastigium of vertex obtusely angulate, wider than long. Elytra extending a little beyond the sixth tergite, not reaching the base of knee lobes. Scapular field wider than the mediastinal.
>
> Total length 18; pronotum 3·5; elytra 9; hind femur 9·5 mm.

The relative length of the female elytra constitutes a further good character for separating *O. alluaudi* from *O. uhagonii* I. Bol., in which the female has strongly abbreviated elytra. (B. P. U.)

40. *Omocestus maroccanus* Chapman. Sidi Ali, ix.1935, 31 ♂♂, 37 ♀♀. This species was described in a previous paper (Chapman, 1937, *Ent. mon. Mag.* **73** : 127–129). It may be noted here, however, that special interest attaches to this species from a zoogeographical point of view, because its relatives are *O. alluaudi* Uv. from the Great Atlas of Morocco (see above), *U. uhagonii* (I. Bol.) from Spain (in which the females are brachypterous) and *O. nanus* Uv. from Asia Minor, in which both sexes are brachypterous as in *O. maroccanus*. Chopard (1936) has recently described two other new species of *Omocestus* from Morocco, *O. le cerfi*, a species from the Middle Atlas, in which the female is brachypterous and the male still unknown, and *O. lépineyi* from near Azib d'Isgoun Ouagouns. Further collecting, particularly in the Great Atlas,

is very desirable to establish the respective ranges of these several species in Morocco, and to obtain more material of *O. alluaudi*. The following comparison of measurements in millimetres with Chopard's recently described species *O. le cerfi* and *O. lépineyi* is given :—

	O. maroccanus.	*O. le cerfi.*	*O. lépineyi.*
♀♀ Length of body	13·0	15·0	15·0
Length of posterior femur	8·1	9·5	9·3
Length of tegmina	3·0	5·0	7·5
Length of pronotum	2·5	3·2	—

	O. maroccanus.	*O. lépineyi.*
♂♂ Length of body	11·6	10·0
Length of posterior femur	7·0	7·0
Length of tegmina	5·3	7·2

Unfortunately, the two specimens from which *O. le cerfi* was described are females. It will be seen from the above figures, however, that both Chopard's species seem to be larger insects than *O. maroccanus* in most respects, except that the male of *O. lépineyi* is shorter in body. The latter species, however, has the tegmina in both sexes considerably longer than in *O. maroccanus*. The male of *O. maroccanus* is distinguishable from that of *O. lépineyi* by the abdomen not being red at the apex, by the tegmina not reaching the apex of the abdomen, and by the wings not being nearly as long as the tegmina. The latter character also distinguishes the females, as in the *O. lépineyi* females. Wings and tegmina are the same length in *O. lépineyi* in both sexes, whereas in *O. maroccanus* the wings are very much shorter than the tegmina in both sexes.

O. le cerfi, besides differing from *O. maroccanus* (female) in its larger size, longer hind femora, tegmina, and pronotum, may be distinguished by the tibiae, which are reddish towards the apex. The antennae in *O. le cerfi* are blackish and *very much* shorter than the head and pronotum together, which is not the case in the female of *O. maroccanus*.

41. *Stenobothrus palpalis* Uv. Sidi Ali, vii.1934, 1 ♀. Tizi N'Test, vi.1936, 6 ♂♂, 2 ♀♀. Azrou, vi.1936, 1 ♂, 1 ♀. Sidi Ali, vi.1936, 8 ♂♂, 6 ♀♀. Timhadit, vi.1936, 9 ♂♂, 6 ♀♀.

42. *Stenobothrus amoenus* (Bris.). Azrou, vi.1936, 3 ♂♂, 2 ♀♀. Sidi Ali, vi.1936, 4 ♂♂, 1 ♀. Timhadit, vi.1936, 3 ♂♂. A note by Uvarov (1937, *Ann. Mag. nat. Hist.* (10) **19** : 308) on this material and one other specimen collected by Werner at Azrou established the position of this species in the Moroccan fauna.

43. *Chorthippus apicalis* (H.-S.). Timhadit, ix.1935, 1 ♂. Azrou, vi.1936, 4 ♂♂, 2 ♀♀.

44. *Chorthippus biguttulus* (L.). Sidi Ali, viii.1934, 1 ♂. Ari Ayachi, viii.1934, 1 ♀. Sidi Ali, ix.1935, 1 ♂, 1 ♀. Azrou, vi.1936, 1 ♂, 2 ♀♀. Uvarov (1927) recorded this doubtfully, and noted that the Moroccan species was large, and the venation of the male tegmina was not typical in having the second radial vein rather suddenly and strongly bent forward. This applies also to my material. This group is, however, in rather a confused state at present, and the precise relationship of these Moroccan specimens to typical *C. biguttulus* is uncertain.

45. *Chorthippus jucundus* Fisch. Sidi Ali, viii.1934, 1 ♀. Timhadit, xi.1935, 3 ♂♂, 5 ♀♀.

46. *Euchorthippus albolineatus* (Luc.). Ijoukak, vi.1936, 1 ♂. Mouldirt, vi.1936, 7 ♂♂, 13 ♀♀.

47. *Dociostaurus genei* (Ocsk.). Sidi Ali, xi.1935, 13 ♂♂, 21 ♀♀. Timhadit, xi.1935, 5 ♀♀.

48. *Dociostaurus dantini* I. Bol. Sidi Ali, xi.1935, 2 ♂♂. Ijoukak, vi.1936, 7 ♂♂, 14 ♀♀. Mouldirt, 2 ♀♀. Tizi N'Test, vi.1936, 5 ♂♂, 3 ♀♀. This species was described from males only by Bolivar (1914 : 186–187). Uvarov (1927) identified the female from two specimens taken by Alluaud at Haut Imminen, Great Atlas. As the female has not been described, a description is given here :—

♀. Considerably larger than the male. Frontal ridge not so concave, more dilated downwards. Tegmina proportionately shorter than in the male, not reaching to the middle of the hind femora. Supra-anal plate more convex than in the male. Length of body 22·5; pronotum 5·0; tegmina 8·0; hind femur 12·1 mm. The females in the above series vary from a length of 24·5 to 21·0 mm., with a corresponding range in the other characters measured. The males have an average length of 15·0 mm., with pronotum 3·5, tegmina 7·3, and hind femora 10·0 mm. It thus looks as though the type, which has the corresponding figures 12·5, 3·5, 5·5, and 9·0 respectively, is rather a small male.

49. *Dociostaurus maroccanus* (Thunb.), phase *solitaria*. Sidi Ali, viii.1934, 1 ♂, 2 ♀♀. Ouiouane, viii.1934, 1 ♀. Sidi Ali, xi.1935, 4 ♂♂, 2 ♀♀.

50. *Arcyptera maroccana* Wern. Azrou, vi.1936, 1 ♂, 1 ♀. Sidi Ali, vi.1936, 5 ♂♂, 6 ♀♀. 2 nymphs taken at Tizi N'Test in June, 1936, also probably belong to this species.

51. *Paracinema tricolor bisignata* (Charp.). Ouiouane, viii.1934, 1 ♂, 1 ♀. Sidi Ali, xi.1935, 1 ♂, 5 ♀♀. Timhadit, xi.1935, 1 ♂, 1 ♀. Jardin d'Essais, Meknes, xi.1935, 1 ♂. As was to be expected, these all belong to the Mediterranean subspecies defined by Key (1936, *Trans. R. ent. Soc. Lond.* **85** : 379–400). Unfortunately, Key did not know of the collection which I had made in Morocco and which was in the British Museum when he wrote his paper, and he has included only one north African (Algerian) specimen among his *bisignata*, the rest of which are European.

52. *Aiolopus strepens* (Latr.). Marrakesh, vi.1936, 1 ♀. Ijoukak, vi.1936, 1 ♂, 2 ♀♀.

53. *Aiolopus thalassinus* (Fabr.). Ourika, vi.1936, 1 ♀. Ijoukak, vi.1936, 2 ♂♂. Taroudant, vi.1936, 18 ♂♂, 14 ♀♀.

54. *Oedaleus decorus* (Germ.). Sidi Ali, viii.1934, 2 ♀♀. Sidi Ali, ix.1935, 7 ♂♂, 6 ♀♀. Timhadit, ix.1935, 2 ♂♂, 3 ♀♀. Ijoukak, vi.1936, 10 ♂♂, 7 ♀♀. Mouldirt, vi.1936, 1 ♀.

55. *Morphacris fasciata sulcata* (Thunb.). Taroudant, vi.1936, 1 ♂, 2 ♀♀.

56. *Oedipoda coerulescens sulfurescens* Sauss. Sidi Ali, viii.1934, 1 ♂, 2 ♀♀. Sidi Ali, xi.1935, 33 ♂♂, 22 ♀♀. Timhadit, xi.1935, 4 ♂♂, 4 ♀♀.

57. *Oedipoda miniata* (Pall.). Timhadit, xi.1935, 10 ♂♂, 15 ♀♀. Ourika, vi.1936, 1 ♀.

58. *Oedipoda fuscocincta* Luc. Sidi Ali, viii.1934, 2 ♀♀. Sidi Ali, xi.1935, 3 ♂♂, 3 ♀♀. Timhadit, xi.1935, 8 ♂♂, 8 ♀♀. Ijoukak, vi.1936, 6 ♂♂, 13 ♀♀. Mouldirt, vi.1936, 1 ♂.

59. *Thalpomena algeriana* (Luc.). The typical form of this species, described from Algeria by Lucas (1849, *Exp. sci. Algérie* **3** : 34) has bright rose-coloured wings, with a black fascia extending to the anterior border and there extending along the anterior border in a transverse band reaching almost to the base of the wing. This typical form was recorded from Tetuan, on the north coast of Morocco, by I. Bolivar (1914). Uvarov (1927) described two colour aberrations from Morocco : *azureipennis*, having blue wings with an abbreviated fascia (from Marrakesh and western Great Atlas); and *viridipennis*, which has pale greenish wings with a strongly developed fascia (from Azrou, Middle Atlas Mountains,

and Fez). My records for 1936 are : *azureipennis*—1 ♂ from Tizi N'Test, vi.1936; *viridipennis*—Azrou, vi.1936, 2 ♂♂, 1 ♀; Sidi Ali, vi.1936, 1 ♂, 1 ♀.

Thalpomena algeriana ab. **flavipennis** ab.n.

Wings pale yellow; fascia strongly developed, apex of wing infumate. Pronotum rugose.

Ifrane (5000–5500 ft.), Middle Atlas Mountains, ix.1935, Coll. Rungs, 1 ♀.

Thus it is seen that *viridipennis* and *flavipennis* occur in central Morocco and the Middle Atlas, while *azureipennis* occurs in the western Great Atlas. Another form, *coeruleipennis*, with blue wings with a very wide fascia, occurs at Tlemcen, north Algeria, and another species, *T. coerulescens* Uv. at Ain Sefra, in the eastern extension of the Great Atlas into Algeria. No collecting has been done in the eastern Great Atlas, but it is possible that blue-winged forms connecting *coeruleipennis* with *T. coerulescens*, and which may eventually prove to be another form of *T. algeriana*, might occur there.

Some specimens with pink wings were taken in the western Great Atlas. They have, however, the fore part of the wing blue. Their connection with *coeruleipennis*, if any, has yet to be shown, and indeed the whole explanation of the occurrence of these colour forms and their distribution in Morocco remains a mystery. While material is so scanty, it would be of little use to attempt an explanation, but, as suggested above, mountain isolation may have something to do with the actual preservation of variations such as these.

Since the above was written, another specimen from Djelfa, Algeria, collected by Karsakoff (v.1937) has come to notice. This appears to be nearest to *coeruleipennis* (having blue wings).

60. *Sphingonotus savignyi* Sauss. Marrakesh, vi.1936, 2 ♂♂, 1 ♀. Not recorded for Morocco by Uvarov, Bolivar or Chopard, and no Moroccan specimens are in the British Museum collection.

61. *Sphingonotus finotianus* (Sauss.). Sidi Ali, xi.1935, 1 ♀. Marrakesh, vi.1936, 2 ♂♂, 2 ♀♀. Ijoukak, vi.1936, 1 ♀.

62. *Sphingonotus rubescens rubescens* (Walk.). Marrakesh, vi.1936, 2 ♂♂.

63. *Sphingonotus lucasii* Sauss. Taroudant, vi.1936, 9 ♂♂, 3 ♀♀. New to Morocco, but previously recorded from Algeria, Tunis, and Egypt.

64. *Sphingonotus maroccanus* Uv. Ari Ayachi, viii.1934, 1 ♂, 2 ♀♀. I have not seen this species in the Middle or western Great Atlas, but Mr. J. L. Chaworth-Musters took one specimen at Taddert, in the western Great Atlas, in February, 1937. The type was taken at Arround by Cockerell (western Great Atlas) in August, and Rungs has also collected *S. maroccanus* at Taddert, in August. It is therefore rather difficult to understand why it was not taken in June, 1936, in several western Great Atlas localities when a good deal of attention was being paid to *Sphingonotus*.

65. *Sphingonotus azurescens azurescens* Rmb. Ari Ayachi, viii.1934, 1 ♀. Marrakesh, vi.1936, 4 ♂♂, 5 ♀♀. Ijoukak, vi.1936, 10 ♂♂, 22 ♀♀.

66. **Sphingonotus coerulans atlas** subsp.n.

Near to the typical race *S. coerulans coerulans* (L.), differing as follows :

♀. Head scarcely projecting above the pronotum, densely and coarsely punctured. Lower posterior angle of lateral lobes of pronotum rounded. Tegmina slightly longer than the posterior tibiae. Hind femora on inside with two light fasciae. General coloration sandy brown. Wings paler blue than in the typical race.

♂. As the female, but smaller. Similar to the typical race.

Geographical distribution.—Morocco : Middle and Great Atlas Mountains.
Specimens examined.—6 ♂♂, 13 ♀♀.

Ari Ayachi, E. Gt. Atlas, viii.1934, 1 ♀. Sidi Ali ou Mohammed, Middle Atlas, ix.1935, 1 ♀. Ijoukak, W. Gt. Atlas, vi.1936, 4 ♂♂, 11 ♀♀. Mouldirt, W. Gt. Atlas, vi.1936, 2 ♂♂. Type ♀ (from Ijoukak) and 18 paratypes in the British Museum (Natural History).

The above description has been worded as far as possible on the model of Mistshenko's descriptions (1936, *Eos*, **12** : 65–282) of subspecies of *S. coerulans*, for the sake of uniformity and facility of comparison.

This is the first record of *S. coerulans* (L.) from the African continent. The other subspecies are : *S. c. coerulans* (L.) Europe and S.W. Asia. *S. c. exornatus* Nedelkov, Italy, Greece, and S.W. European U.S.S.R. *S. c. corsicus* Chopard, Corsica, Sardinia, Balearic Islands, Spain, and Portugal. *S. c. cyanopterus* (Charp.), Europe from Scandinavia to France and Russia. *S. c. caspicus* Mistshenko, Transcaucasus and N.W. Iran. *S. c. insularis* Uvarov, Cyprus.

This new Moroccan subspecies appears to be most like *corsicus*, as might be expected, and *insularis*. It may be distinguished from *corsicus* by its larger size and by the more attenuated lower posterior angles of the lateral pronotal lobes; and from *insularis* by the darker inner surface of the hind femur, and the hind tibiae, which are dark instead of pale blue. It might be considered rather remarkable that such a large and conspicuous insect should have escaped collection in north Africa up to the present. The genus *Sphingonotus*, however, was in rather a confused state until the recent work of Mistshenko (*loc. cit.*), and although I collected an odd specimen in 1934 and 1935, identification was not attempted until Mistshenko's paper was available. It will be seen that the new subspecies is distributed in both the east and west Great Atlas, and in the Middle Atlas. It is therefore not unlikely that more records of its occurrence in other parts of Morocco, and possibly also in other countries of north Africa, may be established.

67. *Acrotylus insubricus* (Scop.). Ari Ayachi, viii.1934, 1 ♂. Timhadit, ix.1935, 2 ♂♂, 16 ♀♀. Marrakesh, vi.1936, 3 ♂♂, 4 ♀♀. Mouldirt, vi.1936, 2 ♀♀. Ijoukak, vi.1936, 2 ♂♂, 3 ♀♀. Taroudant, vi.1936, 11 ♂♂, 8 ♀♀. Sidi Ali, vi.1936, 3 ♀♀. Azrou, vi.1936, 2 ♂♂, 3 ♀♀. Timhadit, vi.1936, 2 ♂♂. Ras el Ma, vi.1936, 1 ♀.

Three subspecies of this grasshopper were found in Morocco. The typical form was taken at Marrakesh, and other specimens between the typical form and *A. i. inficita* Wlk. were taken at Ijoukak, Mouldirt, and Sidi Ali. In the Middle Atlas *A. i. fischeri* (Az.) was the commonest form, and was also taken in the eastern Great Atlas at Ari Ayachi. Evidently the subspecies occurring in a locality does not depend solely on altitude, as those from the Middle Atlas are typical *fischeri*, while others from higher up in the western Great Atlas are almost typical *insubricus*. It is suggested that humidity may be a factor influencing the subspecies of *insubricus*, as the Middle Atlas localities where *fischeri* occurred are much more sheltered and damper than the higher Great Atlas localities where typical *insubricus* was taken.

68. *Acinipe* sp. Azrou, ix.1935, 1 ♀. Ijoukak, vi.1936, 8 ♂♂, 9 ♀♀. Tizi N'Test, vi.1936, 13 ♂♂, 4 ♀♀.

69. *Euryparyphes* sp. Sidi Ali, viii.1934, 1 ♂. Timhadit, viii.1934, 1 ♀. Tizi N'Test, vi.1936, 3 ♀♀. Azrou, vi.1936, 8 ♂♂, 11 ♀♀. Amizmiz, vi.1936, 4 ♂♂, 6 ♀♀. Ras el Ma, vi.1936, 5 ♂♂, 3 ♀♀. Sidi Ali, vi.1936, 1 ♂, 3 ♀♀. Ourika, vi.1936, 1 ♂.

70. *Amigus* sp. ? *nigroadspersus* I. Bol. Ourika, vi.1936, 1 ♀. The confused state of the above three genera and the obscurity of some specific descriptions make it inadvisable to attempt to identify the species at the present time.

71. *Pyrgomorpha agarena* I. Bol. Marrakesh, vi.1936, 2 ♀♀. Azrou, vi.1936, 3 ♂♂, 2 ♀♀. Sidi Ali, vi.1936, 2 ♂♂, 5 ♀♀. Ijoukak, vi.1936, 1 ♂, 1 ♀.

72. *Pyrgomorpha* sp. Ijoukak, vi.1936, 1 ♂, 8 ♀♀. Mouldirt, vi.1936, 1 ♀. Marrakesh, vi.1936, 1 ♀.

73. *Pezotettix giornae* (Rossi) var. *rufipes* Br. Sidi Ali, ix.1935, 3 ♂♂, 3 ♀♀. Timhadit, ix.1935, 1 ♂, 1 ♀.

This variety was previously unrepresented in the British Museum collection. I cannot find any previous record of its occurrence in Morocco. Chopard (1936) recorded *P. giornae*, but whether it is the typical race or *rufipes*, he does not state. It is possible that only the variety with red tibiae is found in north Africa, and, if so, that it may be considered a subspecies.

74. *Amizmizia puppa* I. Bol. Mouldirt, vi.1936, 1 ♂. There are only two other specimens in the British Museum, and both are females.

75. *Calliptamus italicus* (L.). Sidi Ali, ix.1935, 2 ♀♀. Timhadit, ix.1935, 3 ♂♂, 7 ♀♀. Ijoukak, vi.1936, 2 ♂♂, 13 ♀♀. Mouldirt, vi.1936, 5 ♂♂, 7 ♀♀.

76. *Calliptamus montanus* Chop. Sidi Ali, ix.1935, 4 ♂♂, 17 ♀♀. This was labelled " *C. wattenwylianus* Pant. n. sbsp.," by Dr. Ramme, but Dr. Chopard has since identified it as belonging to his recently (1936) described *C. montanus* from Morocco.

77. *Calliptamus wattenwylianus* Pant. Sidi Ali, viii.1934, 1 ♂, 1 ♀.

78. *Calliptamus* sp. Timhadit, viii.1934, 1 ♂, 1 ♀.

79. *Acanthacris ruficornis citrina* (Serv.). Ijoukak, vi.1936, 1 ♂. Taroudant, vi.1936, 1 ♀.

ON THE BRITISH LESTREMIINAE, WITH NOTES ON EXOTIC SPECIES.—3. (DIPTERA, CECIDOMYIIDAE)

By F. W. Edwards, F.R.E.S.

Catotrichini.

In the first paper of this series I remarked that *Catocha americana* Felt did not belong to the genus *Catocha* and probably not to the Catochini; this remark was based on Felt's description and figure. I have now received from Mr. C. T. Greene some additional information regarding the type of *C. americana* and have also received on loan from Prof. C. P. Alexander the types of two allied species, *Catocha nipponensis* Alex. and *C. subobsoleta* Alex., and as a result of the fresh information available I have no hesitation in proposing a new genus and a new tribe for these species. As tribal characters the following may be mentioned :

Ocelli three. *Antennae with the longer hairs on flagellar segments irregularly arranged, not forming distinct whorls.* Wings with *Rs* rather long; *R*5 far removed from costa and almost or quite reaching wing-tip; costa produced; *M* with long fork; *Cu*1 *arising from stem of M*; *CuP* free; *An* long; humeral cross-vein present; *Sc* almost or quite reaching costa; *Sc*2 present.

Catotricha gen. n.

Genotype, *Catocha americana* Felt.

Eyes bare, as usual in Cecidomyiidae, reniform, the dorsal portions very broad, separated in middle. Ocelli three, equal. Antennae (♂) with 2 + 14 segments, flagellar

segments with long necks, the enlarged basal portion bearing long and short hairs, the long hairs numerous but quite irregularly arranged and not all of same length; a slight enlargement of neck just before tip bears several hairs, especially beneath (this is a unique feature in the subfamily); no sensoria. Palpi short, 4-segmented. Thorax with moderately large scutellum and small postnotum; anepisternal area more extensively sclerotised than in most LESTREMIINAE, anepisternal suture complete (in both species examined by me, not incomplete in *C. nipponensis* (Alex.) as suggested by Crampton). No acrostichal hairs;

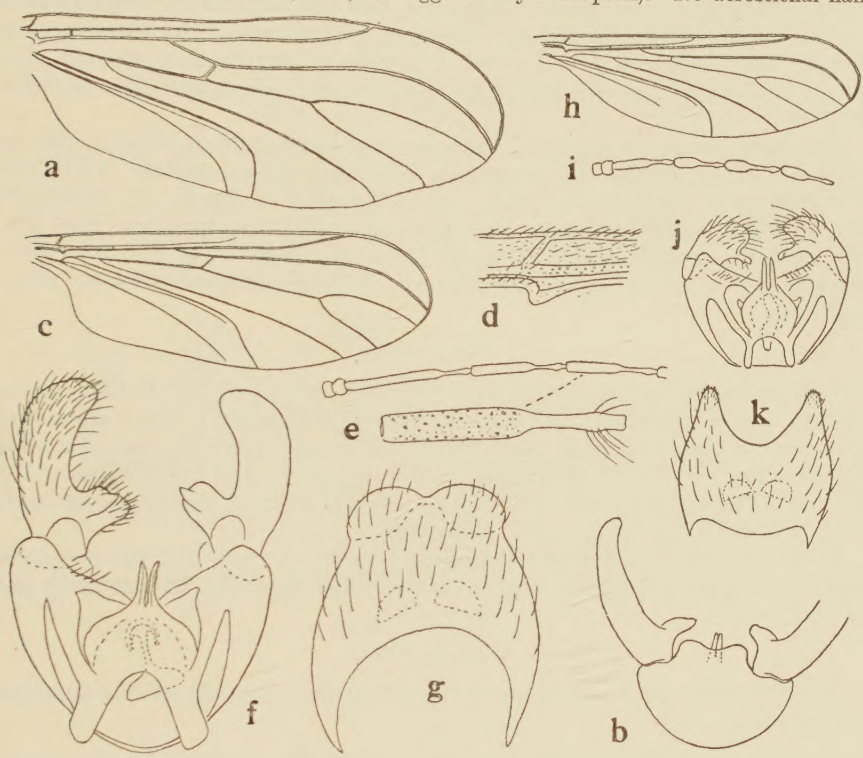

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FIG. 4.—*Catotricha* spp. a, b, *americana*, wing and hypopygium (sketches from type by C. T. Greene). c–g. *nipponensis*: c. wing (hairs omitted); d, base of wing showing pores on *Sc*; e, base of antenna with one segment enlarged; f, hypopygium from above; tergite (g) removed. h–k. *subobsoleta*, wing, base of antenna, hypopygium from above with tergite (k) removed. (c and h to same scale; also f, g, j and k.)

dorsocentrals few and very short; no hairs on pleurae. Legs with pubescence of two lengths, the shorter not at all scale-like. Empodium much shorter than claws. Wings with membrane and veins clothed fairly densely with fine macrotrichia, which are mostly erect or even slightly reflexed; microtrichia dense and rather longer than usual. Humeral cross-vein strong. *Sc* long and almost or quite reaching costa; in *C. nipponensis* (Alex.) at least it bears a group of about 20 pores at the base (fig. 4, d); in this species also (the only one of which I have examined a mounted wing) small pores occur at rather irregular intervals along veins *R*1 and *R*5, at least six on the latter vein. Costa produced well beyond tip of *R*5, but there is no interruption of the marginal thickening at tip of costa; hind border of wing more strongly thickened than usual in LESTREMIINAE. Hypopygium with

the tergite large, bilobed at tip (lobes turned downwards in *C. nipponensis* (Alex.)); anal segment small and hidden; coxites broadly united beneath; style with basal thumb-like projection and no terminal tooth; tegmen of characteristic form, ending in a pair of long points.

The venation of this genus is remarkably like that of the Mycetophilid genus *Heterotricha*, and before seeing specimens of *Catotricha* I was inclined to suspect a relationship with that genus. However, this relationship if it exists cannot be at all close as the antennal and hypopygial structure of the two is entirely different, and *Catotricha* agrees with other CECIDOMYIIDAE in lacking tibial spurs, whereas spurs are present in *Heterotricha* as in almost all other MYCETOPHILIDAE.

The distinctions in venation, antenna and hypopygium between the two North American species (*C. americana* (Felt) and *C. subobsoleta* (Alex.)) and the Japanese *C. nipponensis* (Alex.) are illustrated in fig. 4. *C. subobsoleta*, with its abbreviated anal vein and relatively small hypopygium with short style, evidently stands somewhat apart from the other two species, but nevertheless seems to be congeneric with them. Each of the three is known from a single male.

Catochini.

The species of this tribe are even fewer than in the case of the Lestremiini; they are rare in collections and scarcely anything is known of their life-history, one species of *Catocha* having been reared from moss. The only species of which I have seen a fair amount of material is *C. latipes* Hal., and my definition of the tribe (p. 24) was based upon that species. When some of the others are better known the definition may need modification.

In the few wings of *Catocha* examined I have not made out the pores very clearly; there are apparently one or two near the tip of *R*1, but certainly none at the tip of *R*5.

Catocha Hal.

The following diagnosis has been drawn up from a study of the genotype, *C. latipes* Hal.

Eye-bridges moderately broad. Antennae of ♂ long, 16-segmented, flagellar segments with long necks, the basal part with two hair-whorls, one near base, the other (of longer hairs) near middle, a slight "waist" between them; distally to the longer hair-whorls are some short sensory bristles, which may be simple or branched. Antennae of ♀ 10-segmented, sensoria with more branches than in ♂, resembling those of the subgenus *Anaretella*, but four in number instead of only two; last segment without sensoria. Palpi 4-segmented but rather short; last two segments occasionally fused. Mesonotum with few lateral and dorso-central hairs only. Hypopygium with tergite rather large; anal segment small and hidden; style short, with a black projection near tip which under high magnification appears like a brush of densely-packed spinules; tegmen with two groups of spines attached to its margin; genital rod well marked. Female with two moderate-sized spermathecae. Legs long; front tarsi in ♀ with segments 2–4 thickened and provided with a "sole" (*i.e.* flattened beneath and with dense short bristly hair, this hair arranged in two parallel stripes running the whole length of the three segments). Wings with fairly dense short macrotrichia over the whole membrane. *R*1 long; *Rs* and *rm* both short and about equally oblique; costa produced much beyond tip of *R*5; media with a short fork (which is, however, variable in length, lower branch sometimes incomplete); *Cu*1 arising well beyond base of wing and quite free, not originating from base of *M* as sometimes depicted.

Several of the species described as belonging to this genus are probably incorrectly placed, but the North American *C. slossonae* Felt appears from the descriptions and figures to be a true *Catocha*.

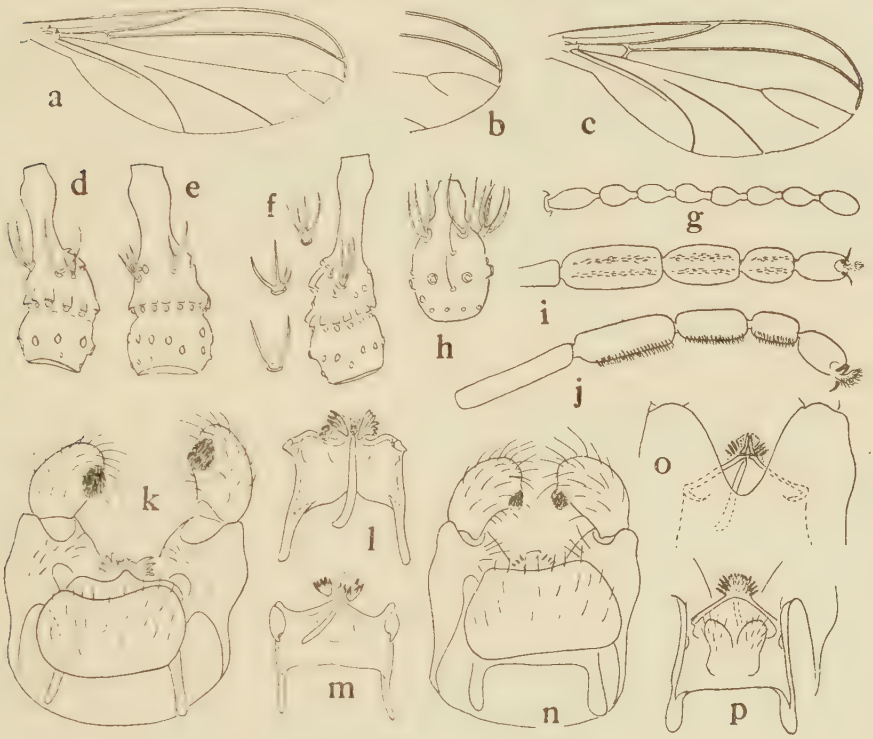

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Fig. 5—*Catocha latipes* Hal. and vars. a, Typical wing (hairs omitted); b and c, variations in median fork (Bonhill and Austwick). d–f. Segment of ♂ antenna; d, Irish ♂ (Barnes coll., Cecid. 528); e, var. from Austwick; f, type ♂ of *kiefferi*, showing variation in sensoria on different segments. g, Outline of ♀ antenna; h, one segment enlarged. i, j, Front tarsus of ♀, ventral and side views. k, Hypopygium from above and l, aedeagus from beneath, of typical ♂. m, Aedeagus from beneath, type of *kiefferi*. n–p. ♂ from Austwick; n, hypopygium from above; o, outline of coxites and aedeagus from beneath; p, basal parts from above with ninth tergite removed.

C. latipes Hal.

C. crassitarsis v. d. Wulp.? *C. muscicola* Kieff.? *C. kiefferi* Strobl.

A small species with shining blackish thorax, dark antennae and abdomen, and legs varying in colour from yellowish to dark brown. Wing-length 2–3 mm. Antennae of ♂ with flagellar segments typically as in fig. 5, d; antennae of ♀ as in fig. 5, g, h; sensoria variable in branching on different segments and even the sensoria of one segment may be different; commonly a sensorium is trifid from the base, but the number of branches varies from 2 to 5 and the branching may not always be from the base. Front tarsus of ♀ as shown in fig. 5, i, j (according to Haliday's original description the third, fourth and fifth segments of the

female tarsi are dilated; this was doubtless a slip of the pen from " second, third and fourth," and Haliday should have added that only the front tarsi are so affected). Hypopygium of ♂ as in fig. 5, k, l (♂♂ from Oxford and Tyrone were found to be closely similar).

I have seen four British specimens: 1 ♂ from Oxford (*Hamm*), 1 ♂ from Bemburb, Tyrone (H. F. Barnes coll., Cecid. 528); 1 ♀ from Bonhill, Dumbarton (*Malloch*), and 1 ♀ from Ippolyts, Herts (*F. W. E.*). There is also a broken ♂ in Winnertz's collection in Bonn named by Haliday.

Of continental specimens I have seen a series of ♀♀ from the Oldenburg collection (Berlin-Dahlem) and the 2 ♂♂ paratypes of *C. kiefferi* Strobl, one of which is here figured (fig. 5, f, m). The supposed distinction in ♂ antennae between *C. latipes* and *C. kiefferi* (indicated by Kieffer and Strobl) was presumably due to the specimens of *C. kiefferi* having been examined in the dry state; in the mounted antenna no difference is apparent. Mr. Kruseman informs me that the type ♀ of *C. crassitarsis* v. d. Wulp still exists in the Amsterdam Museum; it seems to be similar to *C. latipes*.

C. latipes Hal., var.?

A male collected at Austwick, Yorks, v.1933 (*F. W. E.*) may be an individual variation of *C. latipes*, or just possibly a distinct species. It has the median fork of the wing longer than in the other specimens examined, with the lower branch incomplete (fig. 5, c), more numerous hairs in the median whorl of the antennal segments (fig. 5, e) and in the hypopygium a rather smaller black patch on the style (fig. 5, n) and a slight difference in the aedeagus (fig. 5, o, p).

Neocatocha Felt.

Dr. E. P. Felt has kindly supplied me with a sketch of the wing of the genotype, *N. marilandica* Felt (fig. 6, b) and informs me that the wing-membrane is rather uniformly clothed with macrotrichia. The wing shows no important divergence from *Catocha*, the sharply bent vein *Cu* being probably only a specific or individual feature. In 1928 I placed *Neocatocha* as a synonym of *Catocha*, and this may be correct, though the ♀ antenna of *N. marilandica* as described and figured by Felt is very different from that of *C. latipes*. The ♂ of *N. marilandica* is unknown.

Eucatocha gen. n.

Genotype, *Catocha barberi* Felt (North America).

Mr. C. T. Greene has kindly supplied me with information regarding Felt's type of *C. barberi*. Both specimens are males, not females as stated in the original description, and exhibit characters which must definitely exclude them from the genus *Catocha*. The following diagnosis of the new genus which I propose for this species has been prepared from the somewhat damaged paratype, and is necessarily incomplete.

Eyes in contact above. Ocelli (not clearly shown in the mount, the head of which is squashed) apparently two in number, small, and in contact with eyes. Antennae (♂) 2 + 14; necks very long and bare, basal enlargement with a double median whorl (fig. 6, e). Palpi 4-segmented, rather short. Front femora with an antero-ventral row of bristly hairs. Empodium very short. Claws long, nearly straight, with small serrations beneath towards base. Wings without macrotrichia on the membrane or on branches of *M* and *Cu*; on *R*1 and *R*5 single rows of macrotrichia are present. About 4 pores on *R*1 and 6 on *R*5, at rather irregular intervals. Venation (fig. 6, c): Humeral cross-veins apparently

absent as in other Catochini; *Sc* abbreviated at tip as usual; *R*1 long; *Rs* short and transverse, much shorter than *rm*; *R*5 somewhat sinuous, reaching wing-tip; costa produced; posterior wing-margin not much thickened; median fork rather long; *Cu*1 free, arising below *Rs*; *CuP* free; *An* absent. Hypopygium (damaged in the specimen examined, fig. 6, d): coxites and tegmen somewhat as in *Strobliella*, tegmen without teeth at tip;

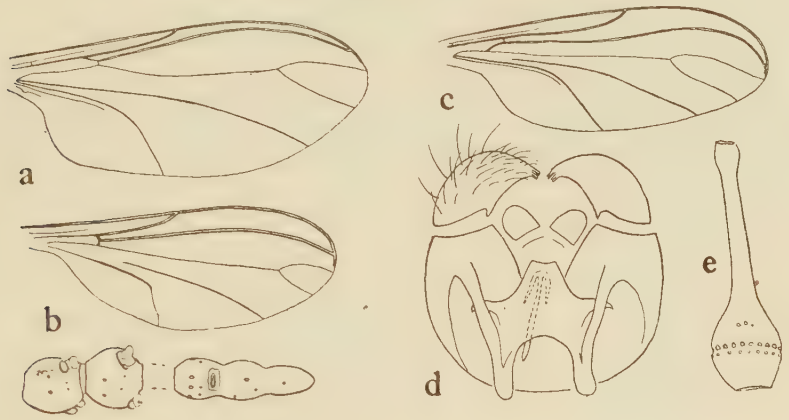

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Fig. 6.—a, *Catarete brevinervis*, wing of type (sketch by Dr. Kemner). b, *Neocatocha marilandica*, wing and antennal segments of type (sketches by Dr. E. P. Felt). c–e, *Eucatocha barberi*, paratype ♂; wing, hypopygium with tergite removed (somewhat reconstructed from the damaged specimen); one segment of antennal flagellum.

anal segment prominent, not hidden; style with a number of fine teeth at tip; genital rod distinct.

Catarete Edw.

This generic name was proposed by me in 1928 for *Lestremia brevinervis* Zett., the type of which I saw in Lund in 1923. The chief characters indicated as differentiating it from *Catocha* were the bare wings (without macrotrichia on membrane), *R*5 running near costa, and the short, 8-segmented antenna with the last segment bristly at the tip. Dr. Kemner has now kindly supplied a sketch of the venation of the type (fig. 6, a), from which it will be seen that a further feature distinguishing the wing of this species from other Lestremiinae is that *Cu*1 runs to the base of the wing (as in Scatopsidae). Dr. Kemner also reports that so far as he can see there are only two ocelli. The genus thus seems to be intermediate between *Anarete* and *Catocha*. The sex of Zetterstedt's type is uncertain as the tip of the abdomen is missing.

C. brevinervis cannot yet definitely be placed on the British list, no specimen having been found since Haliday's doubtful record of one from Cork.

Strobliellini.

This tribe includes the single genus *Strobliella*, founded by Kieffer upon a male taken by Strobl in Austria which has hitherto remained the only recorded specimen. I have examined Kieffer's type, and also two females, taken in Britain, which appear to belong to the same species, and am therefore in a position to correct and complete Kieffer's description of the genus.

The relationships of *Strobliella* are evidently closest to the Campylomyzini, although the venation (especially in regard to veins *R*1, *R*5, *Cu*1 and *Cu*2) is

not unlike that of *Catocha*. A peculiarity not found in the Campylomyzini nor in *Catocha* is the absence of any break in the thickening of the wing-margin at the end of the costa. I have not been able to detect pores in the veins of the specimens examined.

Strobliella Kieff.

Ocelli three, equal in size. Eye-bridges four facets wide. Antennae alike in the two sexes, with more than 20 segments (broken in type ♂); second segment slightly transverse, not enlarged; most flagellar segments (fig. 7, c) rounded, with a rather stout neck about equal in length to the basal portion; swollen part with an irregular basal whorl of short hairs, a sparse median whorl of long spreading dark hairs, and before the neck with numerous short pale curved hairs none of which is specially modified. Palpi 4-segmented, not very

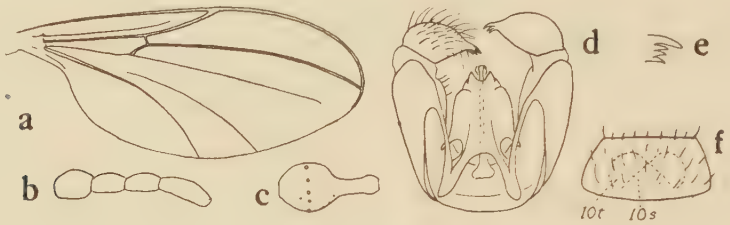

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Fig. 7.—*Strobliella intermedia*, type ♂. a, Wing (hairs omitted). b, Palp. c, Segment of antennal flagellum. d, Hypopygium from above, with (e) tip of style in end view and (f) tergite with underlying anal segment removed and shown separately.

long. Mesonotum with rows of dorso-central hairs, area between these bare. Legs long; hairs on tarsi of two lengths, the shorter pubescence not scale-like. Claws simple. Empodium very short. Wings with rather dense macrotrichia spread over the whole membrane; margin continuously thickened, but distinctly less so from tip of *M* (not uniformly thick as stated by Kieffer). Venation (fig. 7, a): *M* not reaching margin; *Cu*1 free, arising near *r-m* (not at base of wing as stated by Kieffer); R1 long; costa reaching well beyond *R*5; *Rs* nearly or quite transverse and shorter than *r-m* (Kieffer described the two as of equal length and obliquity). Hypopygium (fig. 7, d–f): Tergite large; anal segment small and hidden; coxites largely confluent; style short, toothed at tip; tegmen and genital rod of normal form. Spermathecae: two in number, moderately large and spherical.

S. intermedia Kieff.

♂ (Type). Wing and hypopygium as figured. Wing-length 3·5 mm.

♀. Head blackish, with slight greyish bloom when seen from above and with black pubescence. Antennae nearly as long as whole body, with 2 + 23 segments (in both specimens examined). Proportions of palpal segments about as 1 : 1 : 2 : 3·5. Thorax dark brown, with slight dusting, scutellum and area in front of it yellowish, also shoulders and middle of pleurae. Dorso-central hairs dark, irregularly biserial. Abdomen rather long and slender, distal segments not much reduced in size, cerci very short and broad. Legs long, light brownish; front tarsi simple, no segment at all thickened. Wings appearing blackish owing to dense macrotrichia; venation as in ♂, but in both specimens *Rs* is definitely transverse and barely half as long as *rm*. Halteres light brownish. Wing-length 4–4·5 mm.

Morayshire: Logie, 20.ix.05, 1 ♀ (*F. Jenkinson*). Cheshire: Goyt Valley, 9.x.1932, 1 ♀ (*H. Britten*).

HISPINEN AUS DEM BRITISCHEN MUSEUM. I. Teil.

71. Beitrag zur Kenntnis der Hispinen (Coleoptera Chrysomelidae).

Von Erich Uhmann, Stollberg-Erzgeb.

Communicated by G. J. Arrow, F.R.E.S.

Mir hat ein umfangreiches Material dieses Museums vorgelegen. Ich habe in Folgendem nur die Arten angeführt von denen in faunistischer, systematischer oder körperlicher Beziehung Wesentliches zu sagen war. Von allen Neuheiten sind mir Paratypen nebst viel Material in zuvorkommender Weise überlassen worden.

Neue Gattung: *Sternocthispa.*

Neue Arten:

1.	*Sceloenopla* (*Ocnosispa*) *arrowi* (fig. 1)	Columbia
2.	*Sternostena costaricana*	Costa-Rica
3.	*Clinocarispa plaumanni*	Brasilien
4.	*Clinocarispa subhomalina*	Brasilien
5.	*Sternocthispa gracillima*	Brasilien
6.	*Octhispa lineola*	Amazonas
7.	*Botryonopa dulitana*	Borneo
8.	*Agonia dulitana*	Borneo

Verzeichnis meiner auf den folgenden Seiten citierten Beiträge:

20. 1930, *Fol. zool. hydrobiol.* **1**.
28. 1931, *Rev. Zool. Bot. afr.* **20**.
30. 1931, *Boll. Soc. ent. Ital.* **63**.
51. 1935, *Rev. Ent. S. Paulo* **5**.
54. 1935, *Arb. morph. tax. Ent.* **2**.
56. 1935, *Fol. zool. hydrobiol.* **8**.
61. 1936, *Festschrift Strand, Riga*, **1**.

1. *Prosopodonta latipennis* Pic.

1, Rio de Janeiro (coll. A. Fry), 1, Brasilien (*Cephalolia melanocephala* Dej.) (coll. Laferté). Letzteres Stück mit gelbbrauner Basalhälfte des Halsschildes.

2. **Sceloenopla** (**Ocnosispa**) **arrowi** sp. n.

Obconica, subopaca, elytris nitidulis, sanguinea, prothorace vittis duabus nigris, signatura nigra vel aeneo-micanti elytrorum ut in *S. coccinea* Guér. (*vide* Baly, 1858, *Catalogue of Hispidae*, pl. 9 fig. 2) sed apice nigro in angulo suturali macula communi sanguinea interrupta et macula postmediana in utroque elytro in maculam communem formata differens. Prothorace leviter transverso, angulis anticis prominentibus, sparse punctato; elytris striis decem regularibus, costis quattuor, humeris mediocribus, angulo postico dente parvo, margine postico non denticulato. 6·5 mm.

Der *S.* (*Ocnosispa*) *coccinea* Guér. ähnlich, besonders in der Deckenzeichnung (Fig. 1). Kopf und Halsschild matt, Decken glänzender. Rot oder rötlich-gelbbraun, mit 2 schwarzen Längsbinden auf dem Halsschild, Decken mit schwarzer, grünlich- oder bläulich-metallglänzender Zeichnung, rotgelb bleiben: 1 Fleck ums Schildchen; 1 auf der vorspringenden Basalpartie; 1 schräge Querbinde, die unterhalb der Schulter auf dem Seitenrand entspringt und sich bis zur 1. Punktreihe hinzieht; 1 Randfleck hinter der Mitte

bis oder über die 3. Rippe nach innen reichend; beiderseits 1 Nahtfleck von der Naht bis zur 3. Punktreihe, beide Flecke zu einem gemeinsamen Fleck vereinigt; 1 Querbinde, die innerhalb der Hinterwinkel entspringt und an der Naht unterbrochen ist; 1 kleiner, gemeinsamer Spitzenfleck.—Kopf unpunktiert, mit feiner Mittellinie, zwischen den Fühlern

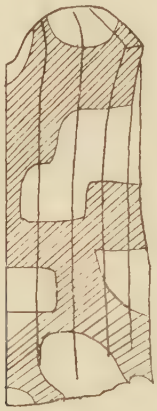

Fig. 1.—*Ocnosispa arrowi* sp. n., rechte Decke.

fein gekielt. Kopfschild mit kleiner, vorspringender, glänzender Keule. Augen gewölbt.—Fühler den Hinterrand des Halsschildes überragend, Glied 1 rundlich, 2–7 länger als breit, wenig voneinander verschieden, 8–10 einander gleich, zylindrisch, etwas dicker als die vorhergehenden, 8 = 6 + 7, Endglied am Ende zugespitzt.—Halsschild um die Hälfte länger als breit, mit vorragenden, spitzen Vorderwinkeln, nach vorn schwach konvergenten Seiten, die in der Mitte schwach gewinkelt sind. Scheibe mit zerstreuten Punkten.—Schildchen länglich viereckig, glatt, glänzend.—Decken zur Spitze schwach erweitert mit kleinem, flachem, aber scharfem, dreieckigem Zahn an den Hinterwinkeln. Seitenrand nach hinten zu etwas verflacht, ganzrandig, Hinterrand erloschen gezähnelt. 10 regelmässige Punktreihen, 4 vollständige Rippen, die beiden äusseren schwächer. Vorderschienen beim ♂ an der Spitze verdickt, mit Zahn.

2, Columbia: Magdalena Valley. El Banco (*C. Allen*).

3. *Sternostena varians* Ws.

1, Amazonien.

4. **Sternostena costaricana** sp. n.

Flavo-testacea, antennis, capite macula frontali excepta, vittis tribus prothoracis, scuto, macula scutellari, lineola subhumerali, tertio apicali, pedibus basi femorum excepta nigris.—Antennis gracilibus, ad apicem incrassatis, interstitio sexto postice subelevato.—5 mm.

Was ich in 20 : 246 und 28 : 361 zu *S. varians* ab. *apicalis* Ws. gestellt habe, gehört nicht dahin. Ich habe den Typus von *S. v.* ab. *apicalis* gesehen und bin nun überzeugt, dass hier nicht etwa nur eine neue Aberration zu *S. varians*, sondern eine gute Art vorliegt. Unterschiede gegen *S. varians* ab. *apicalis*: die basalen Fühlerglieder schlanker, 3 mindestens so lang wie 2, 4 und 5 deutlich länger als breit. Die ungeraden Zwischenräume sind bei *S. apicalis* unterdrückt, bei *S. costaricana* ist der 6. hinten deutlich und etwas erhoben. Körperumriss nicht so schlank, nicht so parallel. Auf den Decken sind schwarz gefärbt: das Enddrittel, sein Vorderrand konvex, eine Schildchenfleck und bei einem Stück die Naht mit der ersten Punktreihe bis zum Spitzenfleck, ein Randfleck unter der Schulter. Bei

S. apicalis ist der Spitzenrand regelmässig gezähnt, die grösseren Zähne fast so lang wie breit, bei *S. costaricana* ist die Zähnung schwächer und unregelmässig.

1 ♂, Costa-Rica: Hamburgfarm, 12.iii.1925 (*F. Nevermann*), Holotypus. 1, Columbia (Pehlke), Paratypus. In meiner Sammlung.

Sternostena varians ab. *triangularis* Uh. (30 : 58) ist doch gute Art wegen des Zahnes der Mittelschenkel.

5. *Anoplitis marginella* Ws. ab.

3, Britisch West-Indien: Trinidad (*G. E. Bryant*), vergleiche 56 : 232.

6. **Clinocarispa plaumanni** sp. n.

Differt a *Clinocarispa fasciata* ab. *interrupta* Uh. prothorace in totum nitende, fronte longiore quam lata, oculis minus convexis.

Der *C. fasciata* ab. *interrupta* Uh. (56 : 230) ausserordentlich ähnlich, unterscheidet sich von ihr:

(1) durch den an den Seiten stärker glänzenden Halsschild. Bei ab. *interrupta* ist er dort matt, nur mitten auf der Scheibe glänzend; (2) durch etwas matt glänzenden Kopf, dessen Augen viel mehr verflacht sind, sie treten aus der Wölbung des Kopfes gar nicht heraus. Stirn deutlich länger als breit. Bei ab. *interrupta* ist die Stirn nicht länger als breit und ganz matt.

Holotypus: Die schwarze Ankerzeichnung in 3 Flecke aufgelöst: ein grosser Schildchenfleck bis zur 1. Rippe, der sich an der Spitze verschmälert, 2 dreieckige Seitenflecke, deren Spitze kaum die 2. Rippe erreicht. Zwischen der 1. und 2. Rippe ist der Anker unterbrochen. Spitzenfleck auf dem Enddrittel (28 : 96).

Paratypus: Ankerzeichnung weiter rückgebildet: Schildchenfleck kleiner, Seitenflecke schmal, nur auf dem Seitenrand unter der Schulter. (23 : 81, 29 : 18.)

Bei einem weiteren Paratypus ist die Ankerzeichnung vollständig.

4, Brasilien: Sa. Catharina: Nova Teutonia (*F. Plaumann*). Meine Sammlung.

Bei einer weiteren Aberration von *C. plaumanni* fehlt die ganze Ankerzeichnung, nur das Spitzendrittel der Decken schwarz. Dieser Paratypus im Britischen Museum. Brasilien: Ilha Santo Amaro nr. Santos. 20.iv.1912 (*G. E. Bryant*).

7. **Clinocarispa subhomalina** sp. n.

Elongata, prothorace subopaco, medio nitidulo, supra nigra, prothorace flavo-testaceo, vittis tribus nigris, lateralibus angustissimis, elytris macula humerali et femoribus dimidio basali flavo-testaceis—*C. fasciatae* ab. *homalinae* Uh. (56 : 228) simillima, sed antennis ad apicem incrassatis, non fusiformibus; prothorace minus alutaceo, punctis distinctis inter se separatis.—Variat vitta transversali accessoria postmediana.—6·5–7·5 mm.

Diese Art ist in ihren dunkelsten Stücken der *C. fasciata* Ws. ab. *homalina* Uh. zum Verwechseln ähnlich. Der Hauptunterschied liegt in den Fühlern, die schon bei einfacher Betrachtung von denen der *C. fasciata* abweichen. Bei *C. fasciata* sind die Fühler von der Schmalseite betrachtet schwach spindelförmig, denn die Endglieder sind so zusammengedrückt, dass schon Glied 10 von der Basis zur Spitze dünner wird. Von der Schmalseite erscheint es daher länger als breit (Vergrösserung 25). Bei *C. subhomalina* sind die Fühler schlanker, Schmal-und Breitseite sind kaum zu unterscheiden, Glied 10 quer. Der Halsschild ist gebaut wie bei *C. fasciata*, aber die Trennungswände der Punkte sind durch Scha-

grin nicht verwischt, sondern ziemlich scharf, in der Mitte glänzend. Diese beiden Unterschiede sind zwar recht fein, müssen aber zur Trennung beider Arten genügen, da diese schon bei einfachem Studium für verschieden gehalten werden. Hierzu kommt noch das eigentümliche Verhalten der Färbung auf den Decken. Beim dunkelsten Stück, dem Holotypus sind sie bis auf die gelbbraunen Schultern schwarz. Bei Betrachtung unterm Mikroskop direkt von oben befindet sich auf der 1. Rippe hinter der Mitte ein kleiner dunkelbrauner Fleck, der dann bei 3 weiteren Stücken immer deutlicher wird, bis er mit blossem Auge sichtbar ist. Beim Holotypus tritt in gleicher Höhe ein kleiner, undeutlicher, dunkelbrauner Seitenfleck auf. Bei 4 weiteren Stücken verbreitern sich die Flecke bis sie schliesslich eine schmale Querbinde bilden. Dann gleichen sie (1) der Nominatform von *C. fasciata* Ws., man wird aber kaum so gezeichnete Stücke beider Arten für zusammengehörig halten; (2) der *C. vinculata* Ws., von der sie nur zu unterscheiden sind einmal durch das Fehlen des Metallschimmers auf den Decken und ferner durch ihre schmale Querbinde. Die Ränder der Binde laufen parallel und divergieren nicht wie bei *C. vinculata* und *C. fasciata* am Deckenrande.—Schenkelbasis gelbbraun, zuweilen nur die Schenkelspitze dunkel. Halsschild gefärbt wie bei *C. fasciata*, mit der auch die Skulptur der Decken übereinstimmt (56 : 228).

8, Brasilien: Pernambuco (*A. Fry*).

8. *Chalepus cautus* Ws.

Eine farbveränderliche Art. 1, Brasilien. Nur ein kleiner Schulterfleck hell.

1, Brasilien: Rio Tapajoz. iii.1874 (*Trail*). Dieses Stück hat ganz schwarze Decken, die nur an der Schulter rötlichbraun sind. Der schmale schwarze Saum entlang der Schulter-Seitenzeichnung kann ganz schwinden oder bis auf einen kleinen Fleck unter der Schulter rückgebildet werden.

9. *Chalepus cordiger* Chap.

Aberration: Halsschild mit breiter schwarzer Mittelbinde. 1, Brasilien: São Paulo (*G. E. Bryant*).

10. *Chalepus viduus* Ws.

1, Ecuador: Macas (*Buckley*).

11. *Chalepus badeni* Chap.

Aberration. 3, B.W. Indies: Trinidad (Bryant). Vergleiche auch 61 : 615.

12. *Xenochalepus cephalotes* Chap.

1 ♂, Brit. Guyana: Kartabo. vii.1922 (*Mrs. M. D. Brindley*).

13. *Temnochalepus lugubris* Chap.

1, Brasilien: Pernambuco (*A. Fry*). Die beiden Mittelbinden des Halsschildes sind fast zu einer einzigen verschmolzen. Die normale, gelbbraune Trennungs-Mittelbinde kaum noch erkennbar.

14. *Oxychalepus insignitus* Chap.

1 ♀. Weise sah den Typus. Die Art ist der ab. *mendax* Ws. recht ähnlich, aber der Seitenrand der Decken ist an den Hinterecken breiter verflacht (von Fühlerbreite).

15. *Uroplata severini* Ws.

2, Amazonas.

16. *Uroplata obscurella* Ws.

2 ♂♂, 1 ♀, British West Indies: Trinidad (*G. E. Bryant*). Merkwürdige Verbreitung.

17. **Sternocthispa** gen. n.

Generi *Octhispae* similis, sed prosterno ad os producto ut in *Sternostena* Ws. et *Sternoplispa* Uh. (54 : 237), ungula in utroque latere dente parvo. Antennis indistincte articulatis, articulis 7 vel 8.

Genotypus: *S. gracillima* sp. n.

Diese neue Gattung scheint zunächst nahe an *Octhispa* zu gehören, unterscheidet sich aber von ihr durch die Bildung der Vorderbrust, die zum Munde zu erweitert vorgezogen ist, sodass dieser sich teilweise darunter verbergen kann. Auch mit *Sternoplispa* hat sie Aehnlichkeit, und ich habe geschwankt, ob sie nicht mit dieser Gattung identisch sei. Als trennende Merkmale sehe ich (1) den nicht dreigeteilten Vorderrand der Vorderbrust und (2) die Fühler an. Sie sind bei *Sternocthispa* undeutlich 7 oder 8-gliedrig, die Nähte sind auf dem letzten Glied nur sehr schwach erkennbar. Bei *Sternoplispa* sind die 11 Fühlerglieder deutlicher zu unterscheiden, obwohl die Glieder 8–11 bei manchen Arten (*opacicollis* Uh. unter *Octhipsa* beschrieben 51 : 58) sehr dicht aneinandergerückt sind. Da die Trennung der Gruppen Chalepini und Uroplatini, soweit sie *nur* auf die Zahl der unterscheidbaren Fühlerglieder gegründet ist, sich künftig nicht mehr halten lassen wird, so ist es durchaus möglich, dass *Sternocthispa* mit *Sternoplispa* vereinigt wird. Dass die einzige beschriebene Art der neuen Gattung abgerundete Hinterecken der Decken hat, ist belanglos.

Sternocthispa gracillima sp. n.

Angusta, elongata, subopaca, brunnea, articulis basalibus antennarum infuscatis, lateribus prothoracis anguste, scuto, humeris nigris, sutura pone scutum et intervallo tertio in medio levissime angusteque infuscatis.—Antennis gracilibus, clavatis; prothorace subquadrato, dense haud profunde punctato; elytris subparallelis, costis tribus integris, intervallis regulariter seriato-punctatis, tertio in humero serie brevi accessoria, margine laterali regulariter serrato, apicali denticulato.—Long. 5·5–6, lat. 1·25 mm.

Langgestreckt, fast parallel, ziemlich gewölbt, nicht glänzend, schagriniert. Braun, Fühlerglied 1–3 oder 2–5 angedunkelt, schwarz: Seiten des Halsschildes sehr schmal, beim Cotypus kaum sichtbar, Schildchen, ein kleiner Fleck auf den Schultern; hinter dem Schildchen ist die Naht sehr fein schmal angedunkelt, ebenso in der Mitte des 3. Zwischenstreifes ein feiner Strich.—Fühlerglied 1–5 schlank, 1–2, jedes länger als breit, 3 so lang wie 2, aber schlanker, 4–5, jedes kürzer als 3, 6 schwach quer, vom 7. Glied Fühler keulig verdickt. Glied 7 undeutlich vom 8. getrennt, letzteres mit sehr schwachen Nähten, Spitze asymmetrisch nach innen gerichtet.—Kopf mit glatter, ebener Stirn, am Augeninnenrand mit feiner, eingegrabener Linie. Kopfschild flach, vor den Fühlern nur wenig in der Seitenansicht vorspringend. Augen wenig gewölbt, Hals nicht abgesetzt.—Halsschild fast quadratisch, mit schwach gerundeten Seiten, in der Mitte am breitesten, mit spitz vorspringenden Vorderecken, dicht, aber nur flach punktiert, vorm Hinterrand mit Quereindruck, Mittellinie sehr fein, vorn und hinten abgekürzt.—Schildchen quadratisch.—Decken hinter den Schultern allmählich verschmälert und ebenso zur Spitze wieder verbreitert, fast parallel. Hinterecken völlig abgerundet, Spitze kaum einzeln abgerundet. Seitenrand regelmässig gesägt, Hinterrand gezähnelt, mit 3 scharfen, vollständigen Rippen, die äusserste fein gezähnt. Zwischenstreifen mit regelmässigen Doppelreihen, Punkte teilweise schwach quer, auf der Schulter im 3. Streif eine kurze Zusatzreihe, einige Skutellarpunkte

da.—Beine einfach, Mittelschienen kaum gekrümmt. Klauen das Toment des 3. Fussgliedes überragend. Klauenglied wie bei *Sternoplispa* mit einem Zähnchen vor jeder Klaue.

2, Brasilien: Petropolis, ii.1857 (*J. Gray*), coll. Baly.

18. **Octhispa lineola** sp. n.

Elongata, parallela, flavo-testacea, antennis nigris, capite et lateribus prothoracis et margine elytrorum latissime nigro-cyaneis, vitta marginali elytrorum intus sinuate terminata, ungulis apiceque abdominis infuscatis.—Fronte laevi, opaca; prothorace subquadrato, punctato, nitido; elytris nitidis, regulariter tricostatis, intervallis regulariter bifariam punctatis, intervallo quarto seriebus medio paene conjunctis, apice leviter singulatim rotundatis, margine laterali minute et regulariter serrato, apicali irregulariter denticulato.—5·5 mm.

Der *Octhispa angustula* Ws., deren Holotypus mir vorliegt, sehr ähnlich und mit der mir unbekannten *O. nigriceps* Ws. sehr nahe verwandt. Ausser in der Färbung unterscheidet sich *O. lineola* von *O. angustula*: durch andere Bildung des Kopfschildes (siehe unten), ferner: Stirn matt schagriniert; mit kurzer Skutellarreihe; vor jeder Klaue ein deutliches Zähnchen.—Gelbbraun, Fühler schwarz; schwarz mit blauem Schein: Kopf; eine breite Binde auf den Halsschild-Seiten, sodass in der Mitte nur eine nach vorn verschmälerte Mittelbinde gelbbraun bleibt; eine Seitenbinde der Decken. Diese Seitenbinde ist nach innen buchtig begrenzt, sie reicht im ersten Deckendrittel bis an die 3. Punktreihe heran, im 2. Drittel verbreitert sie sich und bedeckt ein Stück der 1. Rippe, im Enddrittel verschmälert sie sich auf ein kurzes Stück bis auf die 6. Reihe, die Deckenspitze bleibt breit dunkel, diese Färbung zieht sich auf der Naht etwas nach vorn, sodass die helle Mittelbinde hinten zweiteilig ist.—Fühler wie bei *O. angustula*, etwas kräftiger. Glied 1–6 bei beiden Arten längsgerieft. Kopfschild im Profil erhoben, vorn zum Mund nicht so schräg abgeschnitten wie bei *O. angustula*. Halsschild und Decken bei beiden Arten fast gleich. 2 und 3. Rippe bei beiden hinten vereinigt.

4 Stück: 2, Amazonas (Holotypus), 1, Santarem, 1 Villa nova (alle coll. Baly).

19. *Octhispa gentilis* Ws.

3, Amazonas (coll. Baly. *haematospila*).

Afrika.

20. *Oncocephala senegalensis* Guér.

1, Sierra Leone: Niala an *Ipomaea batatas*. 6.xii.1934 (*E. Hargreaves*).

21. *Oncocephala gestroi* Ws.

4, W. Darfur: S. Jebel Murra, Kallikitting, 4450 ft. vi.1932 (*M. Steele*). Neue Verbreitung.

22. *Decispella monochiri* Uh.

1, Angola: Luimbale, Mt. Moco, 1800–1900 m., iii.1934. Mit grünem Metallschimmer. Neue Verbreitung.

23. *Dactylispa tenuicornis* Chap.

1, Natal: Durban. 1901 (*Bell Marley*). 3, E. Cape Prov.: Katberg (*R. E. Turner*). Decken mit Ausnahme der braunen Striche metallisch.

24. *Dactylispa discreta* Ws.

1, Bechuanaland: Lake Ngami: 2, E. Cape Prov.: Katberg, 4000 ft. x.1932 (*R. E. Turner*). Oberseite der letzteren beiden Stücke braun.

25. *Dactylispa pallipes* Kr.

1, Sierra Leone. 1, Guinea: R. Niger (coll. A. Fry).

26. *Dactylispa pubicollis* Chap.

3, Angola: Congulu, iv.1934 (*K. Jordan*). 2, Angola (coll. A. Fry). 1, Brit. O.-Afr.: Embu (*G. St. J. O. Browne*). 3, Kamerun.

27. *Dactylispa vexatrix* Pér.

1, E. Cape Prov.: Katberg, xi.1932 (*R. E. Turner*).

28. *Platypria transvaalensis* Pér.

4, E. Cape Prov.: Katberg (*R. E. Turner*). Bei diesem Stück sind der 4. Dorn des Humerallappens und der hintere Abschnitt des letzteren hell.

Asien.

Das hier behandelte Material entstammt der Ausbeute der "Oxford University Expedition" (*B. M. Hobby* and *A. W. Moore*) nach Sarawak.

29. *Botryonopa concinna* Gest.

2, Sarawak, foot of Mt. Dulit, junction of rivers Tinjar and Lejok. 23.ix.1932. Old secondary forest.

30. **Botryonopa dulitana** sp. n.

B. kleinei Uh. simillima, sed prothorace sericea, macula apicali elytrorum marginem apicalem attingente. 15·5 × 5·5 mm.

Der. *B. kleinei* Uh. (1931, *Zool. Meded.*, **13**: 178) aus Borneo sehr ähnlich, Halsschild aber seidig glänzend, und der Spitzenfleck der Decken die Spitze ganz bis zum Rand bedeckend. Alle anderen Angaben von *B. kleinei* auch für *B. dulitana* geltend.

♂. Letztes Sternit seicht ausgerandet, glänzend, punktiert. 2 ♂♂. Fundortangaben wie bei 29.

31. *Agonia spathoglottis* Uh.

1, Sarawak: Mt. Dulit, 3000 ft., primitive forest. Halsschild rot, Seitenrand sehr schmal schwarz gesäumt, mit schmaler, schwarzer Mittelbinde. Decken schwarz, neben dem Schildchen ein kleiner roter Fleck beiderseits der 1. Rippe und auf ihr. Spitzenrand mit schmalem, rotem Saum. Neu für Borneo.

32. **Agonia dulitana** sp. n.

Elongata, depressa, nitidula; rufo-testacea, antennis, mandibulis, tarsis nigris, elytris nigro-coeruleis, apice anguste rufo-testaceis.—Articulis 2–11 antennarum elongatis, tertio

articulo parum longiore quam ceteris; fronte laevi; prothorace transverso, dense punctato-sulcatulo, medio area laevi, utrinque carinato, lateraliter et postice impressionibus haud profundis; elytris costis tribus integris, intervallis transversim costulatis, biseriatim punctatis, secundo intervallo basi duabus striis accessoriis irregularibus, margine apicali rotundato, denticulato.—7–7·5 mm.

Diese Art ist der *A. shelfordi* Gest. ähnlich, besonders in der Bildung des 2. Streifens an der Basis mit seinen 4 Punktreihen.—Rotbraun, Fühler, Mandibeln und Tarsen schwarz, Decken beim Holotypus (7·5 mm.) schwarzblau, beim Paratypus (7 mm.) schwarz mit schmal rotbrauner Basis, Hinterrand beider schmal rotbraun.—Fühler die Schultern der Decken erreichend, mit zylindrischen Gliedern 2–11, das 3. etwas länger als das 2., am längsten von allen, unten 3 oben 4 Glieder ohne dichte Pubescenz, dicht punktiert.—Stirn spiegelglatt, Augen gewölbt.—Halsschild trapezisch, vorn eingeschnürt, gedrängt punktiert und längsrunzelig-gestreift, vorn trennt eine Querreihe von Punkten eine schmale Querfläche ab, hinten eine tiefe Querlinie eine ähnliche Fläche, in der Mitte eine flache, glänzende Längsfläche, beiderseits ein schmaler Kiel, seitlich und vorm Schildchen die Scheibe flach eingedrückt.—Schildchen rundlich, nicht gefurcht.—Decken ziemlich parallel, hinten gemeinsam abgerundet, Hinterrand gezähnelt, Seitenrand schmal abgesetzt, mit 3 ganzen Rippen, die Streifen mit Querkielchen und mit Doppelreihen von Punkten, 2. Streif vorn beiderseits verbreitert, dort mit 2 kurzen Zusatzreihen.

1, Sarawak: Mt. Dulit, 4000 ft. Moss forest. 19.x.1932 (Holotypus).
1, Sarawak: R. Kapak, tributary of R. Tinjar. 20.x.1932 (Allotypus). Old secondary forest (*Native coll.*).

33. *Gonophora chalybeata* Baly.

2, Sarawak, Fundort wie bei 29.

34. *Dactylispa discoidalis* Chap.

1, Sarawak: Mt. Dulit, 4000 ft. Moss forest. 20.x.1932. Neu für Borneo.

35. *Dactylispa jacobsoni* Uh.

1, Sarawak, Fundort wie bei 29. Neu für Borneo.

36. *Dactylispa bipartita* Guér.

1, Fundort wie bei 29. Neu für Borneo.

37. *Dactylispa oberthüri* Gest.

2, Fundort wie bei 32, aber: Primitive forest. Undergrowth. 1.x.1932. Neu für Borneo.

38. *Dactylispa minax* Gest.

1, Fundort wie bei 34.

NEW GENERA OF AFRICAN TRYPETIDAE (DIPT.)

By H. K. Munro, B.Sc., F.R.E.S.

Dacus Fabr.

Gymnodacus subgen. n.

Dacinae allied to *Daculus* Speiser, and *Afrodacus* Bezzi, with free abdominal segments, but differing in having anterior supra-alar and pre-scutellar bristles, but no ciliae on the third segment of the male abdomen. They differ from *Chaetodacus* Bezzi (= *Strumeta* Walker, *teste* Perkins) in the absence of the supernumerary lobe of the wing in the male. There are two scutellar bristles.

Genotype: *Dacus mesomelas* Bezzi, 1908 (syn. *aethiopicus* Munro, 1933), the only species known.

Reference may be made to the tables of the genera of Dacinae given by Perkins (1937, *Proc. Roy. Soc. Queensland*, **48**: 59, couplet 17).

Metidacus subgen. n.

Dacinae with fused abdominal segments allied to *Dacus* s.s.; there is a single anterior supra-alar bristle, one pair of basal scutellars but no pre-scutellars. There is no supernumerary lobe on the wing of the male and the species are further distinguished by the absence of ciliae on the third segment of the abdomen of the same sex.

Genotype: *Dacus lotus* Bezzi, 1924. This is the only species recorded, but another is to be described.

See also Perkins (loc. cit., couplet 13).

Tephrella Bez.

Bezzi, 1913, *Mem. Indian Mus.*, **3**: 151 (*nec* Hendel, 1927, *in* Lindner, *Die Fliegen*, **49**: *Trypetidae*: 112, *nec* Bates, 1935, *Pan-Pac. Ent.*, **11**: 103–114).

From an examination of two females of *Tephrella decipiens* Bez. kindly lent by the Director, Zoological Survey, Indian Museum, Calcutta, it is evident that much narrower limits must be given to this genus than Bezzi himself later gave to it. Further, the interpretations given by Hendel and by Bates are incorrect; in the latter case it seems that *Aciurina* Curran may be retained as a good genus for the American species concerned.

Tephrella may be distinguished by the following characters: arista bare; frons pubescent in front; three inferior orbital bristles and the dorso-centrals nearer the line of the anterior supra-alars. There are two basal scutellars and a few setulae at the base of the third vein.

Only the genotype, *T. decipiens* Bezzi, 1913, is included.

Hendrella gen. n.

Tephrella, Hendel, 1927 (*nec* Bezzi, 1913) in Lindner, *Die Fliegen*, **49**, *Trypetidae*: 119.

This generic name is proposed for those European species placed by Hendel under *Tephrella* in 1927. Genotype: *Aciura caloptera* Lolu, 1850, Hendel's description being accepted. The chief differences between this and *Tephrella* are:—

	Tephrella.	*Hendrella.*
arista . . .	bare.	pubescent.
frons	pubescent.	bare.
inferior orbitals . .	three, all strong and brown.	two, strong, brown, rarely an additional white one in front.
superior orbitals . .	two, strong, brown.	one brown, one white.
dorso-centrals . .	nearer anterior supra-alars.	nearer suture.
third vein . . .	setulose at base.	bare (setulose at base in *basalis*).

Dicheniotes gen. n.

Tephrella, p.p. Bezzi, 1924, *Bull. ent. Res.*, **15**: 125 (*nec* Bezzi, 1913).

Similar to *Tephrella* Bezzi, 1913, but with bare frons, pubescent arista, bare third vein and four scutellar bristles. Apparently very like the European species placed in *Tephrella* by Hendel, but these have only two scutellars. It is also very like *Metasphenisca* Hendel, but this has a very long lunule. In the new genus the two superior and three inferior orbital bristles are brown, only the occipital row whitish; frons about half width of head, the fronto-facial angle rounded; lunule short; antennae rather short, third segment rounded at end; face flat, epistome very slightly projecting; proboscis short. Thorax with thick dust on dorsum; bristles normal, brown, dorso-centrals about half-way between suture and anterior supra-alars. Legs and wing normal; third vein bare. Abdomen shining black with slight dust, the sixth segment of the female about as long as the fifth.

Genotype: *Tephrella dispar* Bezzi, 1924.

Unfortunately specimens of all the species placed by Bezzi in *Tephrella*, 1924, have not been seen. One, *T. cyclopica* Bez. (a synonym of *T. gracilipes* (Lw.)) has been made the genotype of *Metasphenisca* Hendel. The species *T. bezziana* End., of which *Aciura latincisa* Bez. seems to be a synonym, appears to belong to the "*Aciura*" group, as does *T. limbata* Bez.; I have seen specimens of both these species. The group is receiving further study. Of *T. rufiventris* Bez., *T. sexfissata* Beck., and *T. tephronota* Bez. no specimens have been available, and the species may be retained here provisionally. Bezzi's species *T. katonae* is common in South Africa, and may be included here although it has slight pubescence on the frons and two or three setulae at the base of the third vein; I have specimens of *T. distigma* Bez. from Southern Rhodesia (from the South African Museum) and of *T. distigma* Bez. from Southern Rhodesia (from the South African Museum) and of *T. erosa* Bez. from the Belgian Congo (from Sir Guy A. K. Marshall); they are very like one another and certainly congeneric with *T. dispar*, although they do not show wing-pattern dimorphism in the sexes.

Euryphalara gen. n.

A genus belonging to the Tephrellini, and allied to *Tephrella*. The very elongate head and the long, thin palpi and proboscis distinguish it from allied genera.

Head elongate, the cheeks wide (as wide as third antennal segment or more), the epistome projecting snout-like to beyond the line of the antennae, the frons and hollowed face thus very prominent before the eyes; palpi elongate; proboscis very long and thin, the base longer than the lower part of the head and projecting beyond the epistome, labellae as long as base. Antennae as long as face, arista pubescent; lunule about one and a half times

as long as wide; frons flat with slight pubescence in front, three inferior and two superior orbitals, ocellars moderate, bristles brownish except upper superior orbital and the occipital row. *Thorax* black, with white pubescence and thick dust, dorso-centrals nearer anterior supra-alars; four scutellars of equal length. Legs normal. Wing with a black pattern with hyaline spots and indentations, almost sub-reticulate, in one species reticulate; third vein bare. *Abdomen* shining black with slight dust barely stronger than "etching," the sixth segment in the female as long as the fifth.

Genotype: *Ensina barnardi* Bezzi, 1924.

Euryphalara barnardi (Bez.).

Bezzi, 1924, *Ann. S. Afr. Mus.*, **19**: 547, pl. xiv, f. 96, wing; 1924, *Bull. ent. Res.*, **15**: 136 (*Ensina*); Munro, 1929, *Ann. S. Afr. Mus.*, **29**: 22 (*Ensina*).

This species seems to be not uncommon in South-West Africa. In well-preserved specimens a median and a pair of dorso-central, shining, brownish stripes are to be seen on the dorsum of the thorax.

Euryphalara barnardi (Bez.) **extensa** var. n.

Closely similar to *E. barnardi*; in the type the dorsal brown thoracic stripes are much stronger and stripes appear over the wing bases as well, and the femora are blacker. The chief difference is in the wing-pattern, which is blacker with the hyaline spots less developed; at the base the black extends broadly over the sixth vein into the anal cell, reaching the wing margin (in *E. barnardi* it barely crosses the sixth vein).

Type ♂ and one ♂ paratype, Zebediela, Transvaal, May 1935, I. B. Kok. (To be deposited in the S. African National Collection.)

Euryphalara mecistocephala (Mro.).

Munro, 1929, *Ann. S. Afr. Mus.*, **29**: 22, pl. I, f. 9, wing (*Ensina*).

Only the male type in the South African Museum, Capetown, is known.

Euryphalara reticulata (Mro.).

Munro, 1929, *loc. cit.*; **24**, pl. I, f. 10, wing (*Ensina*).

In this species the head is identical with that of others included in the genus, the cheeks being very wide. The wing-pattern is, however, reticulate and the body coloration pale, the abdomen entirely reddish (rather discoloured in the type), but probably similar to the reddish abdomens found in some species of *Pliomelaena* in which the abdomen is normally shining black.

Telaletes gen. n.

The species described by Loew* as *Trypeta ochracea* seems to be in an isolated position. Bezzi placed it in *Acanthiophilus*, a genus with which it has little affinity. Since the sixth segment of the female abdomen is as long as the fifth, and the occipital bristles are thick and whitish, the species may be included in Hendel's TEPHRITINAE. Two points must, however, be noted: the third vein is setulose at the base, and the frons pubescent in the middle. In spite of these two characters being present together and both relatively strong, the species may be included in the tribe Tephritini, and seems more nearly allied to *Sphenella*

* Loew, 1860, *Berlin. ent. Z.*, **5**: 295, f. 25.

than to any other genus. The latter has the frons pubescent in the middle, but the third vein is bare, and *T. ochracea* lacks the short row of setulae at the end of the hind femora.

Further, the head is of normal shape, about as long as high, the occiput moderate below and the frons half the width of the head; cheeks and genae moderate, former half width of third antennal segment, the epistome prominent; third antennal segment rounded at end, arista microscopically pubescent. Thorax normal, bristles brownish to pale, pteropleural, one mesopleural and sternopleural present, the dorso-centrals slightly before the anterior supra-alars. Scutellum flat above with four bristles, the apicals slightly the shorter. Legs normal. Wing normal, third vein setulose at base, upper cross-vein beyond middle of discal cell; anal cells with moderate point. Abdomen normal.

Genotype :—*Trypeta ochracea* Loew, 1860, the only species.

Mesoclanis gen. n.

This genus is to include those species placed by Bezzi * in *Ensina* in 1924 and referred to as belonging to the "*dubia*" group. Their inclusion in *Paroxyna* Hend. has been considered, but, although very similar to species of this genus in many details, they may be differentiated by certain characters.

The head is elongate, about one-third longer than high (about as long as high in *Paroxyna*, except in *P. sororcula* Wied.); there is a shining median stripe on the frons and always a little pubescence before the semi-circular lunule (both rarely in *Paroxyna*); there are two superior and two inferior orbitals, occasionally a third inferior; cheeks wide, about as wide as third antennal segment (not as wide, or else narrow in *Paroxyna*); proboscis elongate; palpi elongate, parallel-sided; on the sides of the occiput above the black setulae form a very distinct row, with characteristically one white setula at about one-fourth the length of the row from its lower end (in *Paroxyna* there are usually a few thick, white setulae and the black setulae are more scattered). Thorax as in *Paroxyna*, but usually with a well-marked, broad, brown, median stripe, and a pair of broad, lateral, bluish stripes formed of thick dust. Bristles as in *Paroxyna*, the dorso-centrals about half-way between suture and anterior supra-alars, all brown to black, except the white pteropleural; four long scutellars of equal length (in *Paroxyna* the apical scutellars are apparently never more than half the length of the basals). Legs normal. Wing normal; the third vein with a few setulae at base and at times two or three over the first posterior cell (it is bare in *Paroxyna*); the pattern reticulate and forming in most a characteristic pattern with a more or less completely hyaline bar across the outer third; in one species brown with a few marginal hyaline spots and numerous small, sub-hyaline spots on the disc. Abdomen thickly dusted; also, as in *Paroxyna*, a row of dorsal, sub-median spots which are sometimes more or less fused.

Genotype : *Trypeta dubia* Walker, 1856, the following species also being included :—*Ensina magnipalpis* Bezzi, 1920, *E. hieroglyphica* Bezzi, 1924, *E. cribripennis* Bezzi, 1924, and *E. polana* Munro, 1931.

The species form a biological group associated with the plant *Osteospermum moniliferum* (Compositae) and all, except *M. cribripennis*, have been reared from larvae found in the flowers or seeds. *M. cribripennis* has only been collected on this plant.

* Bezzi, 1924, *Bull. ent. Res.*, **15** : 135; Munro, 1931, *loc. cit.*, **22** : 120.